

Remarks

Claims 11 - 32 are pending. Favorable reconsideration is respectfully requested.

The specification has been amended to correct any errors in trademark usage.

Claim 26 has been amended to remove "it". Withdrawal of the rejection of claim 26 is respectfully solicited.,

Several rejections have been made over copending and commonly assigned U.S. Patent Application Serial No. 11/112,778, either alone or in conjunction with Weitzel U.S. Published Application 2003/0018121 ("*Weitzel*"). Applicants do not agree with these rejections. However, to expedite prosecution, enclosed herewith is a terminal disclaimer over the 11/112,778 application and any patent issuing therefrom. Withdrawal of these rejections is respectfully solicited.

Claims 11 - 18, 19 - 22, and 24 - 28 have been rejected under 35 U.S.C. § 102(b) over *Weitzel* published application 2003/0018121, and claim 23 over *Weitzel* under 35 U.S.C. § 103(a). Applicants respectfully traverse these rejections.

Weitzel discloses coating compositions which may contain a redispersible polymer powder or aqueous redispersion thereof, and a fungicide (biocide) which has been complexed in a cyclodextrin.¹ *Weitzel* does not disclose, nor does he teach or suggest a redispersible polymer powder composition containing a biocide. Rather, none of *Weitzel's* compositions is a powdery composition containing a redispersible polymer powder and biocide, and all *Weitzel's* compositions contain a biocide/cyclodextrin complex. Such a complex is not the same as an uncomplexed biocide. Applicants' claims recite "biocide", not "biocide complex." In *Weitzel's* comparative examples, a liquid biocide, n-octylisothiazolinone, was added to an aqueous polymer

¹ *Weitzel* also discloses that a photoinitiator can be complexed with cyclodextrin as well, but this disclosure is not relevant to the claimed subject matter.

dispersions, and did not have the soiling resistance of the same polymer composition wherein the biocide was complexed with cyclodextrin. Thus, *Weitzel* teaches against the use of uncomplexed biocides.

The subject invention compositions, which employ uncomplexed biocides in the form of a redispersible polymer powder composition, exhibit surprisingly and unexpected advantages over complexed biocides. As indicated on page 1 of the subject application, addition of biocides to mineral coating compositions as illustrated by *Weitzel's* comparative examples has been practiced for many years to discourage growth of algae, mildew, fungi, etc. However, the biocide, to be effective, must be added in relatively large amounts, and even then becomes rapidly ineffective due to degradation of the biocide by the strongly basic coating composition. While *Weitzel* does not say so, it is known that cyclodextrins are widely used for protecting active substances of many kinds from degradation. Cyclodextrin complexes of easily oxidized polyunsaturated compounds such as ω -3 and ω -6 fatty acids have been known for many years. The complexes are much more stable, not only during storage, but following ingestion as well.

Applicants have found, however, that if the biocides are supplied in uncomplexed form in a redispersible polymer powder composition, the biocide is surprisingly more effective than biocide added to the coating separately. As a result, less biocide can be used. Please note the Examples and Comparative Examples.

In both Examples 1 and 2, the biocide n-octylisothiazolinone is used; in Example 1 in the form of an aqueous dispersion (ACTICIDE® OTW pesticide dispersion), and in Example 2, neat (Parmetol DF18). In both cases, the resulting composition was spray dried to form a redispersible polymer powder composition. In Comparative Example 3, no biocide was used, only the redispersible polymer powder, while in Comparative Example 4, the biocide was added directly to the coating composition. The coatings prepared from Examples 1 and 2 showed no microbial growth at all, even after 12 months, while the coating with biocide dispersion directly added showed growth after only 9 months, despite employing 10 times the amount of biocide as compared with Example 1, and 20 times that of Example 2 (see page 13, lines 14 - 19).

It is clear that the directly added biocide was degraded after only a short period, while the biocide supplied in powder form was not degraded. This result is highly surprising and unexpected. Withdrawal of the rejections of the claims under 35 U.S.C. §§ 102(b) and 103(a) is solicited for these reasons.

With respect to the dependent claims, there are further novel and non-obvious differences as compared with *Weitzel*. For example, claims 12, 13, and 30 require spray drying a biocide and an aqueous redispersible polymer dispersion, for example by adding the biocide to the spray drying tower or, as claimed in claim 13, adding the biocide to the aqueous polymer dispersion prior to spray drying. *Weitzel* does not disclose, teach, or suggest doing so. With respect to claims 14, 15, 27, and 29, *Weitzel* only discloses polymer-bound "plasters", where there are no hydraulically settable mineral binder, but only mineral fillers. All the latter claims require a hydraulically settable mineral binder. These claims are separately patentable.

Applicants submit that the claims are now in condition for Allowance, and respectfully request a Notice to that effect. If the Examiner believes that further discussion will advance the prosecution of the Application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

Please charge any fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,

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